

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/661,479	09/15/2003	Ramon M. Navarro	9231	
7590 05/20/2005			EXAMINER	
BRENEMAN & GEORGES			KHAIRA, NAVNEET K	
William D. Brei			ART UNIT	PAPER NUMBER
3150 Commonwealth Avenue Alexandria, VA 22305		3754	· · · ·	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	10/661,479	NAVARRO, RAMON M.				
Office Action Summary	Examiner	Art Unit				
	Navneet Sonia Khaira	3754				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was realized to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	within the statutory minimum of thirty (30) days within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-21 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or						
Application Papers		·				
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)	4)  Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da					

Application/Control Number: 10/661,479 Page 2

Art Unit: 3754

## Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-10, 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 6,338,370) in view of Byrd et al (US 3,865,281).

Referring to claims 1,13,14, and 20, Edwards et al discloses a sanitary fill valve assembly comprising:

a housing (12) having an inlet passage (24B and 24C) for receiving a viscous flowable material from a viscous flowable material source, an annular chamber (14) for receiving the viscous flowable material from the inlet passage (24B and 24C), and an outlet passage (38) from which the viscous flowable material is dispensed;

an ON/OFF (18, col 13) positive controlled product dispenser for dispensing the viscous flowable material from the chamber;

pneumatically (col 4, line 15) operating product dispenser (col 2, lines 54-57) to reciprocate said product dispenser between a first position opening said chamber and second position closing said chamber to permit dispensing of the liquid product (col 4, lines 15-16).

Art Unit: 3754

Edwards et al does not discloses a product flow regulator for adjustably regulating the rate of flow of the viscous flowable material into the chamber. Byrd et al discloses a product flow regulator (250, fig 11) for adjustably regulating the rate of flow (by up/down movement) of the viscous flowable material into the chamber (228, fig 11), the regulating mechanism (250) being disposed in a flow path (from inlet 218 to outlet 234) between the inlet passage (218) and the chamber to at least one of reduce (upward movement) and increase (downward movement) the flow area at the flow path.

It would have been obvious to have modified the dispenser of Edwards et al with the flow regulator of Byrd et al in order to control the flow rate of the fluid into the dispensing chamber as taught by Byrd.

Referring to claim 2, Edwards et al further discloses product dispenser comprises a piston (16, fig 2) cylinder.

Referring to claim 3, Edwards et al further discloses a piston cylinder (16, fig 2) includes a main piston body (wide, upper portion of 16) and a piston head (lower, tip end of piston) disposed at a distal end thereof for dispensing the viscous flowable product from the chamber.

Referring to claim 4, Edwards et al further discloses an annular surface of the housing has a tapered wall adjacent the outlet passage forming a seat for the main piston body.

Art Unit: 3754

Referring to claim 5, Edwards et al further discloses a seal mechanism (20) for positively sealing the piston cylinder (16, fig 1) in the chamber.

Referring to claim 6, Edwards et al further discloses seal mechanism comprises a first seal member (20 E-F, fig 1), a second seal (20D) member and a third seal member (20C).

Referring to claim 7, Edwards et al further discloses a first seal member (20 E-F, fig 1) is disposed on the piston head for cleaning-in-place (seal members below surface 34, fig 1) the outlet passage to prevent dripping of the viscous flowable product during dispensation, the second sealing member (20D, fig 1) being disposed intermediate the main piston body and the piston head for positively shutting off (fig 2) flow of the viscous liquid product during dispensation, and the third seal (20C) member being disposed adjacent the main piston body (16) for preventing fluid leakage (fig 2).

Referring to claim 8, Edwards et al further discloses a drive mechanism (plunger 18, col 3 line 36) for actuating the piston cylinder (16, fig 1).

Referring to claim 9, Edwards et al further discloses a drive mechanism comprises a pneumatic cylinder (col 4, line 15).

Art Unit: 3754

Referring to claim 10, Edwards et al further discloses a dispenser but does not disclose a product flow regulator in which a downward position decreasing the flow area into the chamber and an upward position increasing the flow area into the chamber. Byrd et al discloses a product flow regulator (250) comprises a regulator body (rod- 256) and an adjustment mechanism (cam –col 9, lines 16-19) for selectively displacing the regulator body (250) within the housing between a downward position (fig 12) decreasing the flow area (blocking dispensing opening 226) into the chamber and an upward position (fig 11) increasing the flow area (not blocking dispensing opening 226) into the chamber.

It would have been obvious to one of ordinary skill in the art to have modified the dispenser of Edwards et al by including the flow regulator of Byrd in order to adjust the flow rate at which the fluid will be dispensed.

Referring to claims 15 and 19, Edwards et al discloses a a valve housing (12, fig 2) having an inlet passage (24B, 24C) for receiving a viscous flowable material from a viscous flowable material source, an annular chamber (12,14) in communication with the inlet passage (24B, 24C), and an outlet passage (38) in communication with the chamber (14) for dispensing the viscous flowable material;

a product dispenser disposed within the annular chamber (12) for drawing the viscous flowable material into the chamber and dispensing the viscous flowable material from the chamber (col 2, lines 24-26);

Art Unit: 3754

a sealing mechanism (20) for positively sealing the product dispenser within the chamber (12), wherein the seal mechanism (20) is also adapted to facilitate outlet passage (38) during dispensation of the viscous cleaning-in-place (col 1, lines 41-45) of the flowable material;

Edwards et al further discloses a dispenser but does not disclose a product flow regulator in which a downward position decreasing the flow area into the chamber and an upward position increasing the flow area into the chamber. Byrd et al discloses a product flow regulator (250) comprises a regulator body (rod- 256) and an adjustment mechanism (cam –col 9, lines 16-19) for selectively displacing the regulator body (250) within the housing between a downward position (fig 12) decreasing the flow area (blocking dispensing opening 226) into the chamber and an upward position (fig 11) increasing the flow area (not blocking dispensing opening 226) into the chamber.

It would have been obvious to one of ordinary skill in the art to have modified the dispenser of Edwards et al by including the flow regulator of Byrd in order to adjust the flow rate at which the fluid will be dispensed.

Referring to claim 16, Edwards et al further disclose the product dispenser (fig 1) comprises a piston cylinder (16) having a main piston body (surface on which 16 points) and a piston head (surface on which 34 points) disposed at a distal end (by opening 38) for dispensing the viscous flowable material from the chamber.

Art Unit: 3754

Referring to claim 17, Edwards et al further discloses a piston head (end of 16, towards the opening) is provided with a pair of channels (col 3, lines 64) on an outer circumferential surface for receiving a pair of seal members (above 38, each seal member is retained within a channel).

Referring to claim 18, Edwards et al further discloses wherein each of the seal members comprises an O-ring (col 3, line 39).

Referring to claim 21, Edwards et al further discloses a seal mechanism for cleaning-in place the chamber during the dispensing step (col 1, lines 41-45).

3. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 6,338,370) in view of Byrd et al (US 3,865,281) as applied to claim 8 and further in view of Pankratz et al (US 4,437,498).

Referring to claims 11, the modified Edwards et al and Byrd et al further discloses a dispenser and a cam assembly which lowers or raises the rod which regulates the flow but does not disclose the adjustment mechanism comprises a threaded screw and an adjustment nut. Pankratz et al discloses a hand-wheel 140 has internal threads which engage the external threads on threaded portion (col 7, lines 5-10).

Art Unit: 3754

It would have been obvious to one of ordinary skill in the art to replace the cam assembly of the modified Edwards et al with a nut and bolt assembly of Pankratz in order to adjust the elongate regulator body as taught by Pankratz.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US 6,338,370) in view of Byrd et al (US 3,865,281) as applied to claim 8 and further in view of Cavallaro (US 5,957,343).

Referring to claim 12, the modified Edwards et al further discloses a dispenser and a cam assembly which lowers or raises the rod which regulates the flow but does not disclose the adjustment mechanism is an electric actuator. Cavallaro discloses a material control device is connected to a standard power control system which cooperates with the adjustment mechanism. It would have been obvious to one of ordinary skill in the art to have a power control system of Cavallaro connected to the adjustment mechanism of the modified Edwards et al in order to control the distance of displacement electronically as taught by Cavallaro.

## Citation of Related Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cavallaro et al (US 6,085,943) and Nichols et al (US 5,137,187) references also disclosed apparatuses for fill dispensers.

Art Unit: 3754

## Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet Sonia Khaira whose telephone number is 571-272-7142. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mar Y. Michael can be reached on 571-272-4906. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NK

Navneet Sonia Khaira Examiner Art Unit 3754

MICHAEL MAR SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700